

**SYSTEM AND METHOD FOR
COMPACTING FIELD UPGRADEABLE WIRELESS
COMMUNICATION DEVICE SOFTWARE CODE SECTIONS**

5 **ABSTRACT OF THE INVENTION**

 A system and method are provided for reorganizing
software instructions stored in a wireless communications device
memory. The method comprises: storing wireless device system
software in a plurality of current code sections with the start of code
10 sections at corresponding start addresses by creating a second
plurality of contiguously addressed memory blocks, identifying each
memory block with a corresponding code section, and storing code
sections in identified memory blocks; receiving a new code section via
a wireless communications device air interface; identifying a current
15 code section for updating; calculating the code section sizes; in
response to calculating the code section sizes, generating a
compaction schedule; resizing current code sections; following the
resizing of the current code sections, changing the code section start
addresses; temporarily moving code sections into a file system
20 section; replacing the identified current code section with the new
code section by storing the code sections from the file system section
into memory blocks to maintain contiguous addressing, in response to
the compaction schedule; and, executing the updated system
software.

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